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# **1 Debugging distributed C programs by real time reply**

Larry D. Wittie

November 1988 **ACM SIGPLAN Notices , Proceedings of the 1988 ACM SIGPLAN and SIGOPS workshop on Parallel and distributed debugging**, Volume 24 Issue 1

Full text available: pdf(970.21 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Bugnet is a portable Unix system designed to debug C programs distributed within a local area network. A graphics interface allows the user of a Sun workstation to manage process groups and monitor process interactions very conveniently. Bugnet gives information about interprocess communication, I/O events, and execution traces for each component process. It allows the user to detect an error visually, to roll global program state back to a time before the error, and to replay events almost ...

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Parallel and Distributed Systems, IEEE Transactions on , Volume: 5 , Issue: 11 , Nov. 1994

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High Performance Distributed Computing, 1998. Proceedings. The Seventh International Symposium on , 28-31 July 1998

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Distributed Computing Systems, 1995., Proceedings of the 15th International Conference on , 30 May-2 June 1995

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*Qi Han; Gutierrez-Nolasco, S.; Venkatasubramanian, N.;*  
Network, IEEE , Volume: 18 , Issue: 1 , Jan/Feb 2004  
Pages:56 - 65

[Abstract] [PDF Full-Text (972 KB)] IEEE JNL

---

**5 Development of the order fulfillment process in the foundry fab by applying distributed multi-agents on a generic message-passing platform**  
*Chih-Yuan Yu; Han-Pang Huang;*  
Mechatronics, IEEE/ASME Transactions on , Volume: 6 , Issue: 4 , Dec. 2001  
Pages:387 - 398

[Abstract] [PDF Full-Text (455 KB)] IEEE JNL

---

**6 Adaptive time warp simulation of timed Petri nets**  
*Ferscha, A.;*  
Software Engineering, IEEE Transactions on , Volume: 25 , Issue: 2 , March-A 1999  
Pages:237 - 257

[Abstract] [PDF Full-Text (608 KB)] IEEE JNL

---

**7 Parallelized direct execution simulation of message-passing parallel programs**  
*Dickens, P.M.; Heidelberger, P.; Nicol, D.M.;*  
Parallel and Distributed Systems, IEEE Transactions on , Volume: 7 , Issue: 10 , Oct. 1996  
Pages:1090 - 1105

[Abstract] [PDF Full-Text (1880 KB)] IEEE JNL

---

**8 The Enterprise model for developing distributed applications**  
*Schaeffer, J.; Szafron, D.; Lobe, G.; Parsons, I.;*  
Parallel & Distributed Technology: Systems & Applications, IEEE [see also IEEE Concurrency] , Volume: 1 , Issue: 3 , Aug. 1993  
Pages:85 - 96

[Abstract] [PDF Full-Text (1052 KB)] IEEE JNL

---

**9 Capsules: a shared memory access mechanism for Concurrent C/C++**  
*Gehani, N.H.;*  
Parallel and Distributed Systems, IEEE Transactions on , Volume: 4 , Issue: 7 1993  
Pages:795 - 811

[Abstract] [PDF Full-Text (1260 KB)] IEEE JNL

---

**10 Performance measurement and trace driven simulation of parallel and numeric applications on a hypercube multicomputer**  
*Hsu, J.-M.; Banerjee, P.;*  
Parallel and Distributed Systems, IEEE Transactions on , Volume: 3 , Issue: 4 1992  
Pages:451 - 464

---

[\[Abstract\]](#) [\[PDF Full-Text \(1236 KB\)\]](#) IEEE JNL

---

11 **Time-triggered message-triggered object modeling of a distribute real-time control application for its real-time simulation**

*Moon Hae Kim; Jung-Guk Kim; Kim, K.H.; Myeong-Soo Lee; Shin-Yeol Park;*  
Computer Software and Applications Conference, 2000. COMPSAC 2000. The Annual International , 25-27 Oct. 2000  
Pages:549 - 556

---

[\[Abstract\]](#) [\[PDF Full-Text \(676 KB\)\]](#) IEEE CNF

---

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*Hongmei Gou; Biqing Huang; Wenhuan Liu; Shouju Ren; Yu Li;*  
Systems, Man, and Cybernetics, 2000 IEEE International Conference on , Volu 1 , 8-11 Oct. 2000  
Pages:292 - 297 vol.1

---

[\[Abstract\]](#) [\[PDF Full-Text \(540 KB\)\]](#) IEEE CNF

---

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*Bin Yao; Fuchs, W.K.;*  
Reliable Distributed Systems, 2000. SRDS-2000. Proceedings The 19th IEEE Symposium on , 16-18 Oct. 2000  
Pages:2 - 10

---

[\[Abstract\]](#) [\[PDF Full-Text \(824 KB\)\]](#) IEEE CNF

---

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*Sgouros, N.M.;*  
Multimedia and Expo, 2000. ICME 2000. 2000 IEEE International Conference on , Volume: 3 , 30 July-2 Aug. 2000  
Pages:1367 - 1370 vol.3

---

[\[Abstract\]](#) [\[PDF Full-Text \(400 KB\)\]](#) IEEE CNF

---

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*Mock, M.; Gergeleit, M.; Nett, E.;*  
Object-Oriented Real-Time Distributed Computing, 2000. (ISORC 2000) Proceedings. Third IEEE International Symposium on , 15-17 March 2000  
Pages:26 - 33

---

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